

City Council Parks, Seattle Center, Libraries, and Gender Pay Equity Committee
Seward Park Combined Sewer Overflow (CSO) Project
Frequently Asked Questions (FAQs)
5/15/2014

Other alternatives

Did SPU and Parks consider installing the tank in the meadow location?

Early in the alternatives analysis process, SPU and Parks considered the meadow as a potential feasible location for installation of the underground storage tank in Seward Park. However, Parks and SPU determined that locating the storage tank in the meadow would require placing access structures (e.g., hatches and manholes) and grass-crete for maintenance vehicles in the meadow, which would alter the overall character and usability of the meadow as a soft, versatile green open space. Parks and SPU agreed to remove the meadow from further consideration as the remaining candidates were two paved surfaces (i.e., South Parking Lot and Tennis Courts) under which the storage tank could be installed. This decision was strongly supported by the Friends of Seattle Olmsted Parks. In addition, during the siting process for the Genesee tanks, which occurred at the same time, the community expressed a strong preference for avoiding the addition of hardscape to grassy areas and requested for the tanks to be placed under pavement.

Are there alternative materials (e.g., graphite) that SPU should have considered for the tank?

SPU routinely considers different materials for construction of its water and wastewater facilities. For underground storage tanks, both concrete and steel are routinely used in the industry. The primary determinant for which material is selected is typically cost. For the size of the storage tank being considered in Seward Park, reinforced concrete is the most economically viable material that provides sufficient strength, durability, and reliability. Materials such as graphite are rarely used in the wastewater industry, primarily due to their high cost.

Did SPU consider prefabricating the tank and then laying it in the bottom of Lake Washington?

This alternative was raised to SPU staff during the Draft Environmental Impact Statement (DEIS) public hearing in 2012. SPU researched the potential for the alternative and quickly determined that the alternative would not be allowed by both local and state regulations. The shoreline environment off the southern shore of Seward Park is classified as "Conservancy Preservation," which is the highest possible designation for shoreline protection. The area is considered prime habitat for juvenile endangered Chinook salmon. Laying a tank in the bottom of Lake Washington would negatively impact thousands of square feet of shoreline habitat, and State permitting agencies and Tribes would not approve this alternative, especially since there are viable land-based alternatives (e.g., Tennis Courts and South Parking Lot alternatives).

Public Input

At the DEIS public hearing and the 5/6/14 Council Committee meeting, there were no public stakeholders who showed up in favor of the Tennis Courts alternative. Was there any public support of the Tennis Courts alternative?

SPU and Parks have received public support for the Tennis Courts alternative since 2011. Members of the Friends of Seattle Olmsted Parks (FSOP) have consistently voiced their strong support for the Tennis Courts alternative, compared to the South Parking Lot alternative. The Friends of Seward Park expressed that the tennis court site was the most logical and least impactful to the park in 2011. Many supporters have recently communicated their support for the Tennis Courts alternative in emails to the Seattle City Councilmembers. The Audubon Center, which is the closest facility to the South Parking Lot, continues to support the Tennis Courts alternative via emails and their comments to the Draft EIS. The Seward Park Clay Studio also continues to support the tennis court location as the preferred option. There were DEIS comments from users of the Seward Park playground and nearby neighbors in support of the Tennis Courts alternative. Supporters of the tennis court location prefer to locate the tank under the tennis courts as it will have the least impact on the most park visitors, school groups, youths, and families. Major event users, such as Seafair, have communicated their preference for the Tennis Courts alternative in a letter to the City Councilmembers. SPU also received a strong letter of support for the Tennis Courts Alternative from its Creeks, Drainage, and Wastewater Citizens Advisory Committee (CDWCAC).

Over the past 3 years, SPU and Parks have heard from groups representing broad segments of the population who support the Tennis Courts location due to reduced impacts to this historic community park. The opposition to the Tennis Courts alternative has been primarily from the 10 private property owners who reside in closest proximity to the tennis courts. It is generally the case that members of the public are more likely to attend public hearings to oppose a project alternative than to support one. SPU and Parks have consistently strived to use inclusive outreach and public engagement processes throughout the life of the project to overcome any socio-economic and cultural barriers to providing public input to the City. The documented support for the Tennis Courts alternative, as described in the preceding paragraph, is strong evidence that there are multiple groups, representing thousands of potentially impacted diverse individuals, who are in support of the Tennis Courts alternative.

Evaluation Criteria

What are SPU's and Parks' criteria for recommending the Tennis Courts alternative?

SPU evaluated the two final alternatives (Tennis Courts and South Parking Lot) based on financial, social, and environmental criteria. Financial criteria involved the calculation of short-term and long-term capital and operations and maintenance (O&M) costs for the two alternatives. Social considerations included both short-term and long-term impacts to the

adjacent neighbors, community members and facility operators associated with Seward Park. Environmental criteria were evaluated in the EIS and included consideration of impacts to aesthetics, transportation, cultural resources, geology/land, shoreline use, noise, natural resources, public services, water resources, air, and habitat/wildlife/fish. The evaluation revealed that the two alternatives were somewhat similar in their cost and environmental impacts. The primary difference between the two alternatives was the amount of social impact to the community:

- **Short-Term (Construction) Social Impacts:** Construction of the South Parking Lot alternative would have an effect on the more than 1.1 million annual Seward Park visitors for 2 years through the closure of the main access pathway to the Seward Park loop trail, the park's most frequently visited amenity. Closure of the South Parking Lot would remove close to 20% of the total parking spaces in Seward Park and almost 50% of the lower area parking closest to the Clay Studio, Audubon Center, playground, loop trail, and ADA picnic shelter. The parking lot closure would impact visitors to the Clay Studio and the estimated 21,000 visitors per year to the Audubon Center. In addition, the ADA picnic shelter would be closed and the children's play area would be impacted for the 2-year construction period, affecting thousands of users of those facilities. In contrast, construction of the Tennis Courts alternative would impact far less Seward Park visitors, and the adjacent residences would be most affected by construction noise and vibration for a period of 3-6 months. After 3-6 months, the construction activities at the Tennis Courts site would be far less impacting to the neighbors, based on SPU's experience at the Genesee and Windermere project locations. Closure of the parking lot to the north of the Tennis Courts location, would reduce the total parking at Seward Park by 7%, and the lower area parking by approximately 20%.
- **Long-Term Social Impacts:** The Tennis Courts alternative has no noticeable long-term impacts on the neighbors or on Parks users. This is because the facility is underground and will be invisible to the neighbors without audible sounds and odors, and monthly maintenance of the facility would not require a closure of the tennis courts. In contrast, the South Parking Lot alternative has greater long-term impacts on the users of the Park, because of its location in a centrally used part of Seward Park. Maintenance of the facility would require monthly access and closure of parking spaces in the South Parking Lot, which would regularly displace the thousands of parks users accessing the Seward Park loop trail.

Based on SPU's evaluation of the financial, environmental, and most importantly, social impacts of the two final alternatives (Tennis Courts and South Parking Lot), SPU selected the Tennis Courts alternative as its recommended alternative.

Did SPU and Parks more strongly favor short-term (i.e., construction) or long-term impacts of the alternatives in coming to a recommendation?

SPU and Parks considered both short-term and long-term impacts of the alternatives in its recommendation. As described in the previous question, SPU considered the South Parking Lot alternative to have substantially greater short-term and long-term impacts when compared to the South Parking Lot alternative.

Operations and maintenance impacts

What are the long-term operations and maintenance (O&M) requirements of the tank in either the Tennis Courts or the South Parking Lot?

In either alternative, the tank would fill with a combination of 90% stormwater and 10% sewage approximately 16 times per year, mostly during the wetter months of the year. Both alternatives will require periodic operational closures for maintenance following construction. Regular maintenance of the equipment in the tank will require closures of 4-6 hours approximately 10 times per year after the project is established. During the first two years after construction, the closure rate will be closer to sixteen times per year to make sure the equipment is operating within design parameters. For the Tennis Courts site the closure would be an area between the new tennis courts, and would not require closure of the courts. For the South Parking lot site the closure would be a similar area (2,300 sf) or roughly 10 parking stalls plus the drive aisle. The specific location of the maintenance closure for the south parking is subject to change as design progresses. Approximately once every five years the carbon for the odor control treatment will require replacement. This would shut down either site for approximately 6 hours. Every 25 years, major electrical and mechanical equipment would need to be replaced, which would require longer closures.

Opportunities for improvement at Seward Park

Does the South Parking Lot alternative provide an opportunity for additional improvements in that area of Seward Park?

SPU and Parks do not consider the South Parking Lot alternative an opportunity to improve that area of Seward Park. Rather, it would create both short-term and long-term impediments to recreational enjoyment at Seward Park because of its central location at the entrance to the Seward Park loop trail. Additionally, it would limit the future ability to reconfigure or redesign this central location should park needs change in the future. Parks manages park land long term and it is challenging to anticipate potential drivers for changes at Seward Park in 50 or 75 years. Twenty-four (24) years ago, the South Parking Lot was reduced in size and reconfigured, and it is very possible that additional changes could occur at the South Parking Lot site in the future. SPU and Parks strongly believe that a non-centrally located and lesser used area of the park (i.e., Tennis Courts location) is more preferable for placement of the tank since it maintains the greatest flexibility for future uses in the South Parking Lot.

Short-term impacts to Seward Park

What are the short-term (i.e., construction) impacts to parking, the picnic shelter, playground, and pathway at Seward Park for the South Parking Lot alternative?

The South Parking Lot alternative would require closure of the entire South Parking Lot and its 62 parking spaces (includes 4 ADA accessible parking spaces) for the construction duration of approximately 2-3 years. This represents almost 20% of the total parking at Seward Park, and almost 50% of the “lower area” parking at Seward Park near the entrance to the loop trail, the picnic shelter, the playground, the Audubon Center, and Clay Studio. Removing the South Parking Lot from usage would impact the more than 1.1 million annual Seward Park visitors through the closure of one of the largest and highly used parking lots in the park that serves the day-to-day users of Seward Park and its loop trail, the playground and picnic shelter, the Clay Studio, and the estimated 21,000 visitors per year to the Audubon Center. It is anticipated that the reduction in parking would result in less visitors to Seward Park and higher parking along residential streets in the adjacent neighborhood.

The South Parking Lot alternative would require closure of the adjacent ADA-accessible picnic shelter. (See Picture below.) This ADA-accessible picnic shelter within Seward Park is reserved heavily during the year. The playground would not be closed, although it is immediately adjacent to the large parking lot and would be expected that use would decrease during the construction period due to lack of parking and the close proximity to construction activities. There are two existing pathways to the south and north of the South Parking Lot that lead to the Seward Park Loop trail. The large, flat southern pathway adjacent to the parking lot would be closed during construction for the South Parking Lot alternative and no shoreline access would be provided. The narrow upper path would remain open to allow some non-ADA pedestrian traffic access east to the loop trail. Because of the construction activities in the parking lot and the closure of the southern pathway, it is expected that usage of the loop trail would also drop significantly. Parks maintenance and emergency vehicles would not have access to the loop trail from this area.



What are the short-term impacts to Parks users from the Tennis Courts alternative?

Construction of the Tennis Courts alternative will require complete closure of the two tennis courts in Seward Park for duration of approximately 2-3 years. In addition, there are approximately 23 parking spaces immediately to the north of the tennis courts which would be unavailable during construction. This represents approximately 7% of the total parking at Seward Park, and 18% of the lower area parking in Seward Park. There is also lawn area south and north of the tennis courts that would be unavailable for recreational use during the construction period.

What are the short-term impacts to Seward Park day-to-day users (e.g., visitors, Audubon Center, Clay Studio) and to the surrounding neighborhood from the loss of parking in the South Parking Lot alternative?

The most highly used attraction for day-to-day users of Seward Park is the Seward Park loop trail, which runs along the perimeter of the park adjacent to the water. The primary access point or entrance to the loop trail is through the South Parking Lot. SPU and Parks anticipate that the South Parking Lot alternative would cause a temporary drop in the usage of the Seward Park loop during construction due to lack of parking and the visual impact of a large construction project at the main entrance to the loop trail. The trail can be accessed from the north area near the bathhouse, but parking would be extremely limited. Visitors would have to drive up into the upper loop and find one of the few non-ADA accessible trails that connect down to the shore in order to access the loop trail. ADA access to the loop trail would be especially challenging. Seward Park would not be an inviting place to visit because the construction activities at the entrance would make it difficult to park and access the loop trail.

Visitors to the Audubon Center and the Clay Studio would also be impacted by a significant reduction in available parking spaces immediately adjacent to both facilities at the entrance to Seward Park. As mentioned earlier, closure of the South Parking Lot would reduce the available parking spaces closest to the Audubon Center and Clay Studio by approximately 50%. It is likely that the parking reductions will result in a reduction in visitors and/or students taking classes at the Clay Studio because of the added inconvenience of finding off-site parking to visit the facilities. The Seward Park Clay Studio has been a vital part of Seattle's visual art scene since 1968. Over the years, the Clay Studio has provided a valuable resource to many thousands of people working in clay. They retain over 50% of their students; many of these folks cannot walk very far. Loss of parking near the Clay Studio would create hardships for the elderly and disabled population who take classes at the studio, and impact the Studio's programming, which is dependent on maintaining class sizes. Currently there are about 120 adult students through the week, and about 30 children.

The Seward Park Audubon Center serves over 21,000 people a year, 6,000 of whom are youth from low-income schools coming to the park for a field trip or science workshop. Most of the visitors are from Rainier Beach, Columbia City, Beacon Hill and Seward Park and half identify as people of color. The loss of parking for the South Parking Lot alternative would present a significant challenge for visitors to the Audubon Center and would likely reduce the number of visitors during the construction period.

Lastly, as described earlier, the South Parking Lot alternative would require closure of the adjacent ADA-accessible picnic shelter and would likely impact visitors to the adjacent playground structure.

What are the short-term impacts to large events in Seward Park from the loss of the South Parking Lot during construction?

The South Parking Lot alternative would have a significant effect on events at Seward Park, primarily because of its location at the entrance to the loop trail. The South Parking Lot is frequently shut-down to parking during major events and used for staging activities. Many events (e.g., 5k/10k runs, triathlons, bike rides) funnel participants through the South Parking Lot, since it leads to the loop trail. For example, the finish line of the annual Furry 5K is in the South Parking lot; the event is an important fundraiser for Seattle's Animal Shelter. Many annual smaller events, family gatherings and spontaneous gatherings could be eliminated due to the large construction project in the central area of the park.

Long-term impacts to Seward Park and neighbors

What are the long-term impacts to both Seward Park users and the neighbors from either alternative?

SPU and Parks do not believe that there will be any noticeable long-term impacts of either the Tennis Courts alternative or the South Parking Lot alternative on the neighbors along the west property boundary of the park. In both alternatives, the utility facilities will not be visible to the neighbors and smells and noise will be completely mitigated.

There will be periodic public access closures for routine maintenance at either location. Siting the CSO storage tank in the South Parking Lot does have the potential for greater long-term impacts on Seward Park users, because of the requirement to close down portions of the parking lot for maintenance activities. Also the tank would restrict future changes in the layout or re-design of the park in this area, including softening of the shoreline that is one of the last beaches to need bulkhead removal around the Seward Park peninsula to support endangered juvenile Chinook salmon.

The Tennis Courts alternative would have less long-term impact on Seward Park users as court closure would not be required for monthly maintenance activities. For more significant but infrequent maintenance activities that would occur every 2-5 years, the tennis courts may need to be closed, but closures could be posted, and there are other courts in the vicinity for use.

Does the City have any future long-term plans for the South Parking Lot or the Tennis Courts locations in Seward Park?

The City currently does not have a "Master Plan" for future development and changes to this park. However, over the past 15 years there have been recurring efforts to initiate shoreline restoration projects at Seward Park. Those improvements were superseded by more critical capital needs, but the project is supported by Parks staff, park users, and those who would like to see a better environment for migrating salmon.

Managing the park far into the future will involve adaptive planning as our needs change and a large underground tank in the South Parking Lot would significantly restrict what improvements could be accomplished to accommodate future park use and respond to changing times, such as the parking lot size reduction that has been done in past decades.

Environmental impacts (noise, odor, trees/habitat, etc.)

What is the difference in short-term (construction) vs. long-term noise of the alternatives on the neighbors and Seward Park users?

There is no difference in long-term noise between the South Parking Lot and Tennis Courts alternative on either the Seward Park users or the neighbors. In both situations, the operational noise impacts are indiscernible.

Construction noise impacts are different based on the receptor (picnic shelter vs. neighbors) and the project location. See the following table:

Construction Noise (Technical Memo dated 9/17/2012)		
<i>Affected Group</i>	<i>Tennis Court Site</i>	<i>South Parking Lot Site</i>
Adjacent Homeowners	65 dB to 77 dB	63 dB to 64 dB
Audubon Center	66 dB	70 dB
Playground	67 dB	71 dB
ADA Picnic Shelter	67 dB	76 dB

The change from 60dBA to 75dBA is approximately equivalent to the change from conversational speech to toilet flushing.

Operational Noise (Revised Technical Memo dated 8/26/2013)		
<i>Affected Group</i>	<i>Tennis Court Site</i>	<i>South Parking Lot Site</i>
Adjacent Homeowners	42 dB/ 24 dB	42 dB/ 23 dB
Audubon Center	37 dB/ NA	37 dB/ NA
Playground	37 dB/ NA	37 dB/ NA
ADA Picnic Shelter	37 dB/ NA	37 dB/ NA

Daytime Noise/ Nighttime Noise

SPU is actively working with the neighbors to identify approaches to mitigate the short-term construction noise impact to the neighbors, including replacement of single-pane windows. Based on SPU's experience with the construction of the Windermere and Genesee CSO storage projects, the period of noise impact to the neighbors would be approximately 3-6 months at the beginning of construction, after which the noise impact would be significantly reduced.

What is the difference in impacts on trees and wildlife habitat between the two alternatives?

Both the Tennis Courts alternative and the South Parking Lot alternative require removal of trees to accommodate construction of the underground storage tank. While there are some differences in the trees to be removed at both sites – the total number of trees, the number of exceptional trees, and the preservation value of the trees – altogether, the impacts on trees and wildlife habitat of the two alternatives are similar. In both cases, the trees to be impacted are not considered primary habitat for an endangered species. All trees will be replaced at a minimum of 2-1 ratio. While it is not desirable to remove any trees in Seward Park, most of the trees that are proposed for removal are not native, and all trees will be replaced with native species and shrubs that will help regenerate vegetation and native wildlife species.

Will there be any long-term sewer odors from either alternative on the neighbors and Seward Park users?

SPU plans to construct state of the art odor control for either the Tennis Courts alternative or the South Parking Lot alternative. The tanks will be automatically cleaned after they are emptied, and the air inside the tank will be treated through a carbon unit that operates 24 hours per day, 365 days per year. There will be no long-term sewer odors from either alternative on the neighbors or Seward Park users. This is an improvement from the current condition that has no air treatment in an existing underground sewer pipe next to the tennis courts.

Are there any differences in the stability of the slopes at the Tennis Courts site vs. the South Parking Lot site? Is either site more prone to landslides?

Both the Tennis Courts site and South Parking Lot site have similar geotechnical features. Both sites are located between a slope and the shoreline. To address the shoreline, both sites will require de-watering during construction of the groundwater of similar quantities. Both sites will also have to address sub-surface and surface drainage after construction. Both sites are anticipated to have similar quantities of surface and sub-surface drainage that the project will have to convey around the tank.

Both the Tennis Courts site and South Parking Lot site are adjacent to slopes approximately 30-feet to 35-feet high. Portions of both slopes have been mapped as environmentally critical areas with slopes matching or exceeding 40%. Based on subsurface investigations and mapped geology, the slopes are likely comprised of Blakely Formation bedrock, overlain by a thin mantle of soil (comprised of weathered bedrock and topsoil). Blakely Formation bedrock is a sedimentary rock formation that is generally stable. No signs of instability have been observed at the tennis court site. At both the tennis court site and the south parking lot site the storage tanks will be approximately 20 feet to 30 feet away from the base of the slopes.

SPU/Parks responses to concerns of neighbors

What is SPU's and Parks' approach to responding and/or lessening the construction concerns and long-term concerns of the neighbors?

SPU is committed to addressing the construction concerns of the neighbors. A number of concerns have already been raised through discussions with the neighbors, and SPU has made adjustments to its design of the Tennis Court alternative to accommodate the interests of the neighbors. For example, SPU and Parks relocated an exhaust vent away from the neighbors' properties and further into the park to address concerns regarding gas emissions from the tank. In addition, SPU did considerable design work to minimize noises from the tank, thereby making the operational noise from the facility indiscernible during both the daytime and nighttime. In addition, SPU understands that neighbors have concerns about the potential for single-pane windows and side sewers to break during excavation activities. Although SPU does not believe that either side sewers or windows will be damaged during construction, SPU has discussed the

possibility of proactive replacement of the windows and side sewers to address this concern. SPU has also had discussions regarding landscaping improvements and even offering window shades to the neighbors to address other concerns. SPU is confident that the neighbors' construction concerns can be adequately addressed. As mentioned earlier, SPU is also confident that there will be no long-term impacts of the Tennis Courts alternative on the neighbors. The neighbors have expressed a concern about inviting more people into this area of the park, and the best solution for the neighbors is to install a fence along their property line.

Furthermore, the construction of a similar-sized tank near Magnuson Park over the past 18 months has happened in even closer proximity to residences and a daycare center with no negative effects on the neighbors. The construction team worked closely and successfully with all the concerned neighbors before and during construction to mitigate impacts on the neighbor and park users.

Cost and schedule differences between 2 alternatives

What would be the cost impact of changing the recommended alternative from the Tennis Courts to the South Parking Lot?

At the time that the Draft and Final EIS were published in 2012-13, SPU had determined that there was no difference in cost between the Parking Lot and Tennis Courts alternatives. Since then, there has been considerable work done to advance the design of the Tennis Courts alternative to meet the schedule requirements of the City's NPDES permit and federal Consent Decree. As such, changing the recommended alternative from the Tennis Courts to the South Parking Lot would create additional costs for SPU.

At a minimum, the cost of changing to the South Parking Lot alternative would be \$2.6 million, due to the cost of re-starting the design at the new location. In addition, there are long-term concerns that building a tank underneath the South Parking Lot would restrict the possibility of constructing a more natural shoreline at the parking lot site in the future. To address this concern, the tank could be lowered by as much as 10 feet. This would add a cost increase of up to \$10 million to the project.

Therefore, the added cost of changing the recommended alternative to the South Parking Lot site would be between \$2.6 million to \$12.6 million.

What would be the schedule impact of changing the recommended alternative from the Tennis Courts to the South Parking Lot?

Changing the recommended alternative to the South Parking Lot alternative would immediately delay the project by approximately 14 months. As a result, the City would miss its NPDES permit regulatory milestones for submitting 90% Plans and Specifications, Final Plans and Specifications, and Construction Start. By missing these dates the City risks having to pay fines of up to \$10,000 per day. SPU preliminarily believes that it could meet its Consent Decree

deadlines for Construction Completion and Achievement of Controlled Status with several months of float available for project delays. However, there would be added risk of non-compliance with the Consent Decree due to the delay in the project schedule. The Consent Decree deadlines carry daily fines per violation which start at \$3,000 per day and increase to \$5,000 per day after 30 days.

Shoreline Code

Can SPU install a tank in the South Parking Lot and meet the new Shoreline Code requirements for a 25 ft setback for new structures?

SPU would be able to install the tank in the South Parking Lot site and meet the new Shoreline Code requirement for a 25 foot setback for a new structure.